NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: DRAFT

Region: Mooresville Regional Office

County: Iredell

NC Facility ID: 4900121

Inspector's Name: Karyn Barksdale **Date of Last Inspection:** 04/20/2018

Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): 3A Composites USA, Inc.

Facility Address:

3A Composites USA, Inc. 3480 Taylorsville Highway Statesville, NC 28625

SIC: 2672 / Paper Coated And Laminated, Nec

NAICS: 322222 / Coated and Laminated Paper Manufacturing

Facility Classification: Before: Title V After: Fee Classification: Before: Title V After:

Permit Applicability (this application only)

SIP: .0503, .0515, .0516, .0521, .1100, .1111,

NSPS:

NESHAP: DDDDD, JJJJ, ZZZZ

PSD:

PSD Avoidance: .0317,VOC **NC Toxics:** .1100, .0711

112(r): Other:

	Contact Data	Application Data	
Facility Contact	Authorized Contact	Technical Contact	Application Number: 4900121.15A
Chris Alvis EHS Manager (704) 838-7038 3480 Taylorsville Highway	Sean Doig Plant Manager (704) 872-8974 3480 Taylorsville Highway	Chris Alvis EHS Manager (704) 838-7038 3480 Taylorsville Highway	Date Received: 04/13/2015 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 03700/T22
Statesville, NC 28625	Statesville, NC 28625	Statesville, NC 28625	Existing Permit Issue Date: 06/20/2018 Existing Permit Expiration Date: 06/30/2021

	Total Actua	l emissions in	TONS/YEAR:
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CY	SO2	NOX	voc	со	PM10	Total HAP	Largest HAP
2017	0.0300	3.56	31.08	2.99	0.0200	19.17	7.21 [Formaldehyde]
2016	0.0300	3.81	30.08	3.20	0.9700	20.62	8.43 [Formaldehyde]
2015	0.0200	2.63	31.04	2.20	0.1500	20.03	7.71 [Formaldehyde]
2014	0.0200	3.31	38.78	2.81	0.2500	22.59	9.96 [Formaldehyde]
2013	0.0200	3.63	28.73	3.03	0.2722	13.12	3.79 [Phenol]

Review Engineer: Jenny Sheppard Comments / Recommendations:

Issue 03700/T23

Review Engineer's Signature: Date: DRAFT Permit Issue Date: DRAFT Permit Expiration Date:

1. Purpose of Application:

This permit modification is a renewal of an existing Title V permit for 3A Composites USA, Inc. The existing Title V permit number **03700T22** was issued on June 20, 2018, and was scheduled to expired on June 30, 2021. The renewal application was postmarked/received on April 13, 2015, or at least nine months prior to the expiration date of January 31, 2016. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied pursuant to 2Q .0513.

2. Facility Description

The facility manufactures foam and paperboard used in art supplies and man-made wood fiber veneer for the furniture industry.

3. History/Background/Application Chronology

February 1, 2011 – Permit 03700T18, TV Renewal.

January 11, 2012 – Permit 03700T19, TV Minor modification to add new product line.

July 3, 2014 – Permit 03700T20, TV Minor modification to replace saturator dryers.

April 13, 2015 – Renewal Application 4900121.15A received and deemed complete for processing

July 28, 2016 – Permit 03700T21, TV Minor modification to remove landfill gas as a fuel for boiler and saturator dryers and change in description for IES-SBT.

June 20, 2018 – Permit 03700T22, TV Minor modification to add new lamination line

4. Permit Modifications/Changes and ESM Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Pages	Section	Description of Changes
Attachment	Insignificant activities	
Cover	ı	-amended all dates and permit revision numbers
All	Header	-updated permit revision number
3-4	Equipment table	-updated page numbers for equipment, moved ES-2, ES-14, ES-15, and ES-16 to insignificant activities per the request of the facility (applicability determination 3312) calculations show them to be below 5 tons per year and 1000 pounds per year.
All	All	Added 0 to 2D and 2Q throughout the permit
5-20	2.1 and 2.2	Updated all condition language to current.
	2.1E	Added requirements for MACT DDDDD
20-28	General Conditions	Updated to current general conditions
29	List of Acronyms	Updated the list of Acronyms to current

5. Regulatory Review

The facility is currently subject to the following regulations:

15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers

15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes

15A NCAC 02D .0516, Sulfur Dioxide Emissions from Combustion Sources

15A NCAC 02D .0521, Control of Visible Emissions

15A NCAC 02D .0958, Work Practices for Sources of Volatile Organic Compounds (removed)

15A NCAC 02D .1100. Control of Air Toxic Pollutants

15A NCAC 02D .1111, Maximum Achievable Control Technology (40 CFR 63, Subparts JJJJ, ZZZZ, and DDDDD)

15A NCAC 02Q .0317, Avoidance Conditions (15A NCAC 2D .0530, Prevention of Significant Deterioration, VOC)

A regulatory review for these current permit conditions will not be included in this document except for 40 CFR 63, Subpart DDDDD (added at this renewal). Where applicable, the permit conditions have been modified to reflect current working shell conditions.

15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability

- a. For the existing sources(s) designed to burn gas 1 fuels with a heat input capacity equal to or greater than 10 million Btu per hour, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."
 - i. The Permittee shall comply with the CAA §112(j) standard through May 19, 2019. The Permittee shall be subject to the requirements of this standard starting May 20, 2019.

Definitions and Nomenclature

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date

d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications

- e. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later). The notification shall contain the following:
 - i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
 - ii. the following certification(s) of compliance, as applicable:
 - (A) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63 Subpart DDDDD at the site according to the procedures in.40 CFR 63.7540(a)(10)(i) through (vi)' [i.e., g. i and i. ii.]; and
 - (B) "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [i.e., paragraph h. below] and is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

General Compliance Requirements

f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

Work Practice Standards

- g. i The Permittee shall conduct a tune-up of the source(s) annually as specified below.
 - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown:
 - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown):
 - (D) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject; and
 - (E) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
 - ii. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up.
 - iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
 - iv. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
 - v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in paragraph g. are not met.

Energy Assessment Requirements

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: [§63.7500(a)(1), Table 3]
- h. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements

- i. The Permittee shall keep the following:
 - i. a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
 - ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
 - (A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
 - (B) a description of any corrective actions taken as a part of the combustion adjustment; and
 - (C) the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
 - iii. the associated records for paragraphs f. through h.
- j. The Permittee shall:

- i. maintain records in a form suitable and readily available for expeditious review;
- ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
- iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
- k. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in paragraphs i. through j.

Reporting Requirements

- 1. Pursuant to 40 CFR 63.7550(b), the Permittee shall submit compliance reports to the DAQ on an annual basis. The Permittee shall submit the compliance report postmarked on or before January 30 of each calendar year for the preceding 12-month period. The first report shall be postmarked on or before January 30, 2020.
 - i. This report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
- m. The compliance report must contain the following information:
 - i. Company name and address;
 - ii. Process unit information, emissions limitations, and operating parameter limitations;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. The total operating time during the reporting period;
 - iv. If there are no deviations from the requirements of the work practice requirements in paragraph g. above, a statement that there were no deviations from the work practice standards during the reporting period; and
 - v. Include the date of the most recent tune-up for each unit required according to paragraph g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.
- n. For deviations from a work practice standard during the reporting period, the report must contain the following information:
 - A description of the deviation and which emission limit or operating limit from which you deviated; and
 - ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
- o. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in paragraphs l. through n. are not met.

6. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NESHAPS/MACT/112j – The Permittee is currently subject to several Maximum Achievable Control Technology Standards. National Emission Standards for Hazardous Air Pollutants from Paper and Other Web Coating (40 CFR 63, Subpart JJJJ). National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ)

National Emission Standards for Hazardous Air Pollutants (NESHAP) from New and Existing Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources under 40 CFR 63, Subpart DDDDD. The current permit includes the compliance, monitoring, recordkeeping and reporting requirements for this MACT.

<u>112(r)</u> – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect this status.

<u>CAM</u> – 40 CFR 64 requires that a continuous compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. A Compliance Assurance Monitoring Plan review was conducted as part of the renewal of the permit in 2011. In the review, it was determined that for the emission sources that were currently installed that a CAM plan was not required at that time. Since 2011, the facility has added one production line, one lamination line and a replaced the saturator dryers. The compliance assurance monitoring (CAM) rule requires owners and operators to conduct monitoring to provide a reasonable assurance of compliance with applicable requirements under the act. Monitoring focuses on emissions units that rely on pollution control device equipment to achieve compliance with applicable standards. An emission unit is subject to CAM, under 40 CFR Part 64, if all of the following three conditions are met:

- The unit is subject to any (non-exempt, e.g., pre-November 15, 1990, Section 111 or 112 standard) emission limitation or standard for the applicable regulated pollutant.
- The unit uses any control device to achieve compliance with any such emission limitation or standard.
- The unit's pre-control potential emission rate exceeds 100 percent of the amount required for a source to be classified as a major source; i.e., either 100 tpy (for criteria pollutants) or 10 tpy of any individual/25 tpy of any combination of HAP.

The emission sources installed since the last CAM review are uncontrolled therefore a CAM review is not needed at this time.

7. Facility Wide Air Toxics

Currently this facility has conditions for 02Q .0711 and 02D .1100, and the renewal of the permit does not affect the limitations contained in these conditions.

8. Facility Compliance Status/Compliance History:

The facility was last inspected by Karyn Barksdale of the MRO on April 20, 2018. Based on her observations and records review, the facility was found to be deficient for reporting requirements as defined in Section 3 – General Condition NN of the permit. A NOD was sent to the facility on May 22, 2018.

A NOV was issued Karyn Barksdale to the facility on November 20, 2017 for late submittal of the reporting requirement for the specific condition found in Section 2.2 C. 1. d.

An inspection was conducted on March 20, 2017 by Bob Caudle and found to be operating in complance.

9. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. The State of Virginia and the Forsyth County Local Program are affected state/local program within 50 miles of the facility.

The following comments were received: (TO BE COMPLETED AFTER PUBLIC and EPA COMMENT PERIOD.)

10. Conclusions, Comments, and Recommendations

A professional engineer's seal was not required for the renewal application.

A consistency determination was not required for the renewal application.

MRO recommends issuance of the permit and was sent a DRAFT permit prior to issuance. (**TO BE COMPLETED AFTER REGIONAL COMMENTS ARE RECEIVED**)

RCO concurs with MRO's recommendation to issue the renewed air permit. (TO BE COMPLETED AFTER PUBLIC and EPA COMMENT PERIOD.)